UNITED
NATIONS

WORLD CONFERENCE ON
NATURAL DISASTER REDUCTION

Yokohama, Japan
23-27 May 1994

Distr.
GENERAL

A/CONF.172/4/Add.1
27 April 1994

Original: ENGLISH

Item 8 of the provisional agenda*

ACTIVITIES FOR NATURAL DISASTER REDUCTION

International Decade for Natural Disaster Reduction

Report of the Secretary-General of the Conference

Addendum

Summary of national activities for natural disaster reduction

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* A/CONF.172/1

GE.94-01866 (E)
94-98237

1. For the purpose of the discussions to be held by the World Conference on Natural Disaster Reduction and for the mid-term review of the implementation of the International Framework of Action of the International Decade for Natural Disaster Reduction to be carried out by the Economic and Social Council, the Secretariat for the International Decade for Natural Disaster Reduction (IDNDR) requested the national committees and/or focal points for the Decade to report on and evaluate activities ongoing or already completed in the field of natural disaster reduction. In particular, countries were requested to indicate the progress made towards meeting the three Decade targets and their plans towards fully achieving those in the second half of the 1990s. These targets are:

(a) Comprehensive national assessment of risks from natural hazards, with these assessments taken into account in development plans;

(b) Mitigation plans at national and/or local levels, involving long-term prevention and preparedness and community awareness;

(c) Ready access to global, regional, national and local warning systems and broad dissemination of warnings.

2. The reports were requested in the form of two separate documents: a detailed national report and a summary report. Guidelines were provided for the detailed national reports, and it was requested that the summary report be submitted in the form of a completed questionnaire.

3. The World Conference provided a considerable incentive to national committees and/or focal points. By the beginning of April this year, 92 national reports had been received by the IDNDR Secretariat, and varied in length from one to 300 pages.

4. Altogether, 135 countries are formally participating in the Decade, and while not all have reported on their national activities for natural disaster reduction, the World Conference provides the first opportunity for a global account of disaster mitigation activities, both implemented and planned.

5. The purpose of the present report is not to evaluate specific national achievements and programmes, since the information provided was not sufficient. For that purpose, individual national reports should be consulted. The aim of the present report is to provide an overall picture of the natural disaster reduction activities undertaken by countries in all parts of the world.

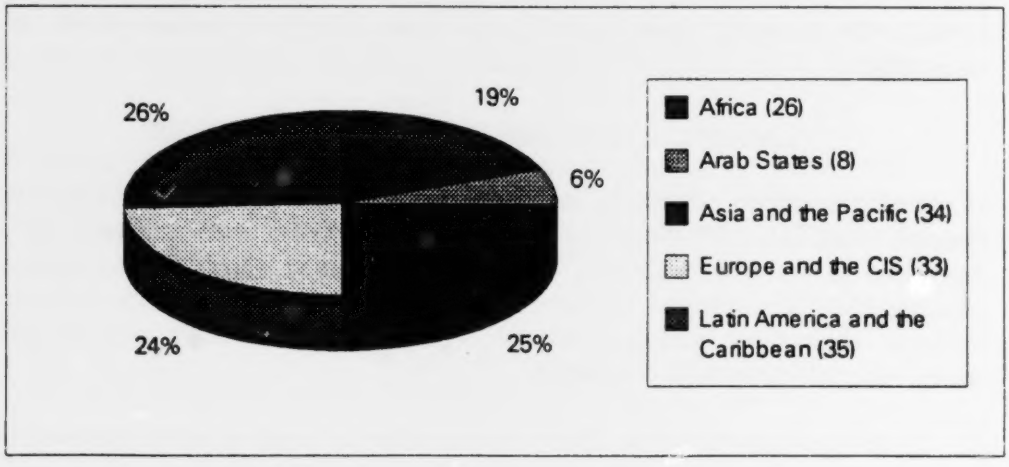
6. The present report and the full texts of the national reports which may be consulted during the World Conference provide a unique source of information to all national committees, whether active or inactive and in industrialized, developing or least-developed countries, to donor governments, and to international, regional or other organizations.

Number and regional distribution of national committees and/or focal points

7. The number of countries participating in IDNDR is 135, of which 83 have established national committees and 48 have appointed focal points. Four countries (Albania, Angola, Slovak Republic, Niger) are currently in the process of establishing a national committee. Since the beginning of 1992, 39 new national committees and/or focal points have been established. The distribution of countries participating in the Decade is indicated in figure 1 below.

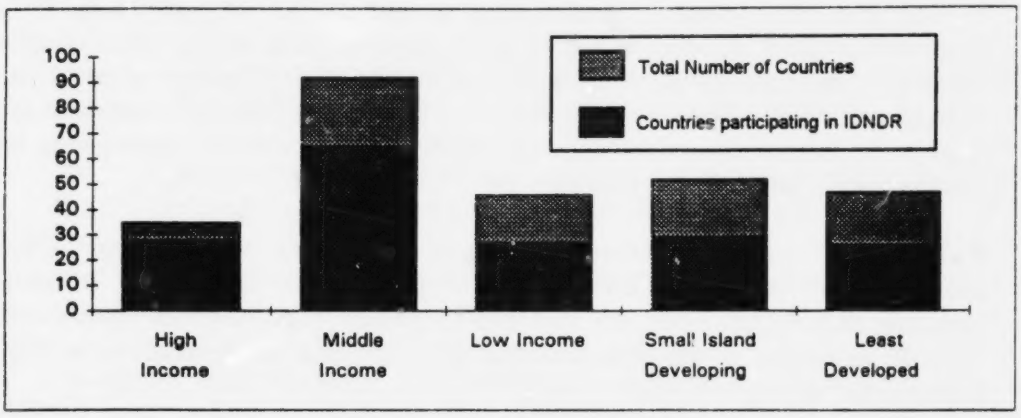
8. The largest increase in national committees and/or focal points was in the Pacific and among members of the Commonwealth of Independent States (CIS). In both, one particular country has taken the lead and established a coordination mechanism for IDNDR, in respect of the other countries (i.e., the Russian Federation for CIS and Australia for the South Pacific).

Figure 1: Distribution of countries participating in the International Decade for Natural Disaster Reduction



9. Of the 52 small island developing countries identified throughout the world, 29 are participating in IDNDR, and 26 of the 47 countries identified as least developed are represented. Furthermore, of the 135 countries participating in IDNDR, 28 can be considered high income countries, 65 considered middle income, and 27 considered as low income countries. For a breakdown of countries according to economic aggregates, see figure 2.

Figure 2: Countries participating in IDNDR according to economic aggregates



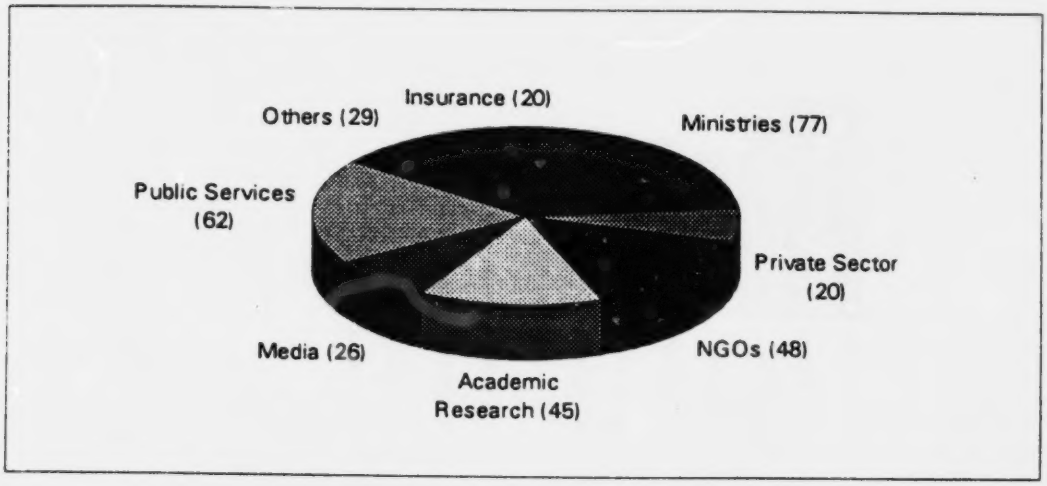
10. An 1992 assessment of activities of national committees and/or focal points showed that 32 countries had not gone beyond an initial endorsement of the aims of the IDNDR. Of those 32 countries, 12 have since submitted national reports to the Secretariat.

Composition of national committees and focal points

11. Ideally, as recommended in the report of the Secretary-General submitted to the General Assembly (E/1989/114/Add.1-A/44/322/Add.1) and endorsed by the Assembly in resolution 42/169, a national committee should be composed of representatives of responsible ministries, government bodies and services, research and scientific institutions, non-governmental organizations, the media and the private sector, especially insurance companies.

12. Of the reporting countries, 78 reports providing information on the composition of their IDNDR mechanism (see fig. 3).

Figure 3: Composition of IDNDR national committees and focal points



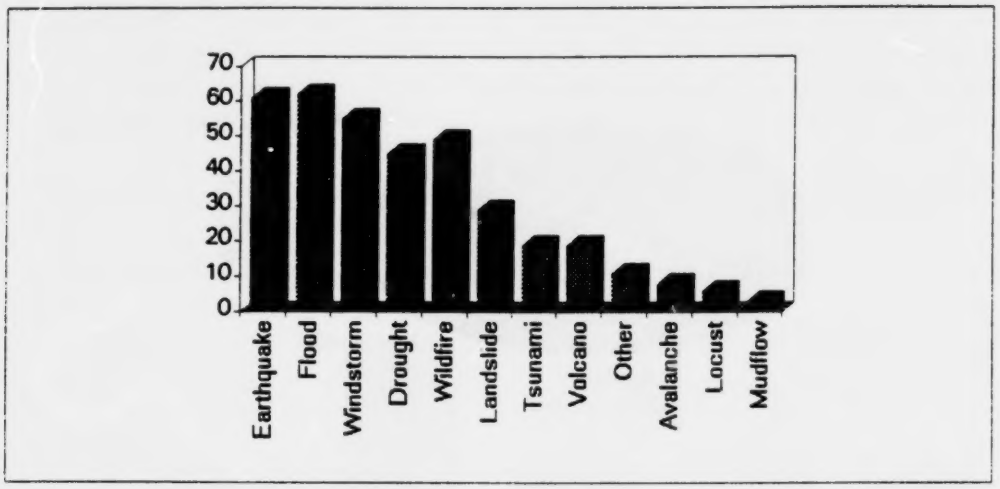
13. While two years ago non-governmental organizations, the media, insurance companies and the private sector were unrepresented in national committees, these sectors are now far better integrated.

Prevailing hazards

14. In 88 reports, information was provided on prevailing natural disasters: floods (62), earthquakes (61) and windstorms (55). Many countries included a number of technical, environmental and other man-made disasters which were not taken into consideration in the evaluation conducted because they were not within the IDNDR scope.

15. The reports show that prevailing hazards in recent years caused more than 750 individual natural disasters, affecting more than 300 million people, claiming more than 160,000 human casualties and resulted in economic losses of over $US 177 billion (see fig.4).

Figure 4: Prevailing hazards



Availability of assistance and assistance required for natural disaster activities

16. Fifty-seven countries indicated that they could make assistance available to other countries. The type of assistance available includes technical equipment (offered by 47 countries), know-how (offered by 43) and financial assistance (offered by 17 countries). According to the reports under review, assistance was requested by 58 countries, 46 of which required know-how, 49 technical equipment, and 43 required financial assistance. Table 1 below provides a quick reference to areas of assistance.

Table 1: Main areas of assistance available or required for disaster reduction

Assistance available			Assistance required		
Know how	Technical equipment	Financial	Know how	Technical equipment	Financial
training	rescue teams	general	training	fire fighting	general projects
risk assessment	medical relief		risk assessment	medical relief	relief goods
hazard mapping	information systems		hazard mapping	information systems	building of warehouses
monitoring	communication systems		public awareness	emergency communication	logistics/ transport
vulnerability assessment	relief aid (general)		disaster legislation	relief aid	shelter/ evacuation centers
early warning	logistics/ transport		hazard monitoring	logistics/ transport	shore protection
disaster management	scientifical data		disaster management	disaster warehouses	information systems
building standards	meteorological services		agricultural measures	information material	awareness programmes
community preparedness	flood warning systems		flood control	satellite tracking	building of headquarters
research assistance	structural risk reduction measures		public information policies	early warning systems	low-cost housing

17. Training was requested or offered by most countries. Assistance in risk assessment, hazard mapping and monitoring was offered by a number of countries almost equal to the number requesting it.

18. While the purpose of transferring and requesting know-how was primarily to improve disaster prevention strategies, the purpose of providing and requesting technical equipment was directed at preparedness and relief operations. Of particular importance in the latter case were rescue teams and equipment, communication systems and logistics and transport.

19. It is interesting to note that there is almost a perfect match between the assistance offered and the assistance required. Countries which have offered or requested assistance could consult individual national reports or the lists available with the Secretariat so that potential donors can be matched with recipients.

Disaster mitigation activities completed or under way

20. The costs of more than 1,300 individual projects listed in the reports review amounted to more than $US 8 billion (see table 2).

Table 2: Disaster mitigation activities

	Identification of hazard zones	Monitoring, Prediction and Warning	Short-term protection measures	Long-term preventive measures	Land-use and risk management	Public information and education
Number of countries reported	68	71	64	56	50	57
Number of projects	231	175	192	301	80	402
Estimated costs of projects	1,6 billion US$	242 million US$	2,7 billion US$	3,3 billion US$	142 million US$	42 million US$

Steps taken towards achievement of the three main targets of the International Decade for Natural Disaster Reduction

(a) Comprehensive national assessments of risks from natural hazards

21. Risk assessment is one of the first steps that should be taken towards effective disaster reduction, and 60 countries listed their achievements and future plans in this area. A number of industrialized countries in Europe considered themselves low-risk areas with no specific need for risk assessment and hazard mapping. Nevertheless, most countries not prone to natural disasters indicated that risk assessment was both necessary and supported within assistance provided to developing countries threatened by disasters.

22. Most countries reported that their efforts at risk assessment were concentrated on the principal prevailing hazard. Only in a few countries were comprehensive risk assessments being carried out or previous assessments updated.

23. Hazard maps had been developed in most of the countries that reported on risk assessment. Gaps, however, existed in the provision of observation and statistical information. Furthermore, it was considered that micro zonation should be increased in particularly vulnerable areas that would otherwise be neglected in large-scale maps.

24. Although hazard maps are available, they rarely take into account loss assessment in the case of a disaster or evaluate the probability of the disaster re-occurring. Further, few countries have combined hazard maps with an assessment of vulnerability of the population, sectors of society and life-lines at risk, or the special conditions prevailing in megacities.

25. Some countries indicated that data provided by insurance companies, agricultural departments and civil defence offices, as well as information on emergency preparedness and the possible influences of climate change, have been integrated into hazard mapping and risk assessment. Nevertheless, in general, the users have not been closely involved in risk assessment although it is obvious that their inclusion in that process would have provided improvements not only in the methods applied but also in the collection and quality of data, the density of networks and the upgrading of instrumentation.

26. In their reports, 27 countries stated that risk assessment had been integrated into development planning. One industrialized country noted that the concept of risk assessment would best be integrated into the development plans of, and support provided to, developing countries. Other countries reported that financial input into disaster reduction was increasing progressively, along with national economic development.

(b) Mitigation plans at the national and local levels

27. Altogether, 46 countries reported that disaster mitigation plans were in place. Apart from addressing natural as well as technological, environmental and other disasters, most of those plans were focused on disaster relief and preparedness activities and included only marginally disaster prevention measures.

28. Legislation, building codes, land-use and other regulations lacked a mechanism for enforcement and control, and incentives for implementation. Some countries reported on the financial implications of their national disaster mitigation planning but since they covered for the most part reduction as well as relief efforts, with only a small percentage allocated to natural disaster reduction activities.

29. Long-term disaster prevention activities were reported as being implemented or planned by 36 countries. These activities were concerned mainly with structural or re-enforcement measures.

30. The disaster preparedness activities reported on by 39 countries were concentrated on building institutional and infrastructural capacities for relief activities mainly at the national rather than at the local or community level. In this respect, it should be noted that some countries had cooperated in the establishment of regional inter-governmental organizations to promote disaster preparedness.

31. Community awareness activities were ongoing or planned in 34 countries and included training and sensitization; establishment of regional, local or community-based centres; simulation, evacuation and drill exercises; psychological and behavioural studies; and special media programmes. Some countries specified the sectors of society that were involved, for instance, schools, universities, non-governmental organizations, insurance companies, trade unions and political parties.

(c) Ready access to global, regional, national and local warning systems and broad dissemination of warnings

32. Access to global warning systems was reported by 29 countries. Specifically mentioned were services provided by World Weather Watch, meteorological satellites, the World Center on Tropical Cyclones, the Global Seismic Network and the databases maintained by Red Cross and Red Crescent Societies. Many countries stated that access to such a technology was not possible because of a lack of financial resources and insufficient technical infrastructure.

33. Access to regional services were reported by 41 countries which named specifically regional warning centres such as the Pacific Tsunami Warning Center (operated from the United States of America), information provided by the Southern African Development Community (SADC), the Nordic Warning System (Sweden, Denmark, Finland and Norway), the African Regional Centre for Remote Sensing, for Drought Monitoring and the Inter-governmental Authority on Drought and Development (IGADD) in Djibouti, the Asian Typhoon Committee and the Joint Pacific Typhoon Warning Centre in Guam, United States Navy cyclone warning and advisories, the Cyclone Forecast Reunion, the National Emergency Management Agency (NEMA) in Trinidad and Tobago and the Economic and Social Commission for Asia and the Pacific (ESCAP). Many countries also indicated co-operation with neighbouring countries, as in the case of the Central American Center for Prevention of Natural Disasters.

34. National warning systems, mainly meteorological, hydrological and seismological monitoring services, were listed by 55 countries. Among these, 23 have wide-spread local monitoring and information networks and warning stations with adequate connection to national co-operation agencies. Many countries also reported the use of amateur radio networks.

35. Forty countries reported on arrangements made to disseminate warnings to the population at risk, some reaching as much as 70 to 100 per cent of the national population. The effectiveness of the dissemination of warnings depends mainly on national media, such as newspapers, radio and television, telecommunications, and siren warnings usually used for civil defence purposes. Problems do arise in mountainous areas or small islands States, or in rural areas where adequate telecommunications are often lacking. In these cases, special contact points were assigned the responsibility of spreading the information to the population within their area. The problem of delays the transmission of information was mentioned in several reports and the need for adequate emergency communication systems was emphasized by many countries.

National plans and legislation for natural disaster reduction

36. On the basis of information provided in the reports, it would appear that 76 countries have specific plans and legislation for natural disaster reduction. Most of the plans and legislation, however, concern preparedness and relief: only 25 countries have legislation dealing exclusively with natural disaster reduction. Fifty countries reported legislation for natural disaster reduction as being integrated into existing legislation for relief activities and disaster situations.

Overall evaluation of national disaster mitigation strategies

37. National committees and focal points were requested to assess whether the targets set by the national committee had been met and whether national disaster mitigation plans had been implemented, and to report on other IDNDR activities undertaken.

38. According to the reports received, most national committees and focal points had spent the recent years attracting political attention and raising public awareness in order to secure support for and to implement disaster mitigation activities. In some cases, this process was hindered by a lack of high-level political representation or participation in the committee, or the too scientifically oriented composition and aim of the committee.

39. A large number of countries recognized that when a national committee was officially established, with appropriate inter-sectoral composition, and serving as an advisory body to and intervening in the decision-making process of Governments, natural disaster mitigation would be eventually integrated in the formulation of national socio-economic plans and their implementation. It was considered that this would pave the way for a comprehensive approach to natural disasters, from relief measures to sustainable development.

40. The inclusion of disaster management strategies and projects in the national development plans, as reported by 27 countries, is an indication of the growing political awareness and the acceptance by political leaders and Governments of the importance and cost-effectiveness of natural disaster reduction activities.

41. In their reports, most developing countries expressed great expectations concerning the outcome of the World Conference on Natural Disaster Reduction as a means of gaining more support - both political and financial - nationally, internationally and bilaterally.

42. The shortage of funds, and lack of technical assistance and know-how, were considered by most developing countries to be the major reason for the delay in progress in the formulation of comprehensive disaster reduction plans, the improvement of comprehensive disaster management, risk assessment and disaster reduction engineering undertakings.

43. Achievement of the aims of the International Decade for Natural Disaster Reduction requires all components of the international community providing bilateral disaster assistance to take a proactive stance in order to reduce the threat before disasters strike. A variety of organizations are already engaged in cooperative international efforts aimed at natural disaster reduction. These programmes include the provision of assistance to disaster-prone countries in the development of warning systems, and mitigation capabilities and the capacity to assess their vulnerability to natural hazards. While these are significant and important programmes, they represent only a small portion of foreign assistance for disasters.

44. Although the benefits of reducing the impact of disasters to achieve sustainable economic development strategies are increasingly recognized by policy-makers as well as disaster and development experts, disaster reduction measures are not incorporated into most externally sponsored development programmes.

45. Some developing countries drew attention to the difficulties they face in acquiring access to and in influencing existing international and bilateral resources with regard not only to post-disaster relief but also support for disaster reduction projects. Increased efforts, therefore, are needed to demonstrate the cost-effectiveness of investments in disaster mitigation efforts and to ensure that the concept of vulnerability is taken into account in all activities as an explicit objective in line with all the other targets recommended for development projects. Bearing this in mind, there is a need to further explore appropriate and effective intervention strategies for disaster prevention and mitigation together with the humanitarian and emergency assistance efforts which are growing increasingly throughout the world. To meet the aims of the International Decade for Natural Disaster Reduction, prevention, mitigation and preparedness activities must be assigned priority within overall disaster and development assistance programmes.

Review of the International Decade for Natural Disaster Reduction

46. National committees and focal points were requested to review activities for the International Decade on Natural Disaster Reduction and accomplishments so far made, and to suggest modifications and improvements for the second half of the Decade.

47. The Decade was viewed by several countries as a very valuable instrument for increasing awareness of the need and usefulness of disaster reduction activities in developing countries.

48. The three targets of the Decade to be reached by the year 2000 are clearly set; according to the national reports, only the momentum to achieve them is lacking. This was considered due to the fact that, to a great extent, countries and international organizations are not yet convinced that to meet those targets, disaster mitigation activities, with appropriate funding and technologies, must be increased.

49. The lack of resources for the implementation of Decade activities at the national level was emphasized by most of the developing countries and especially least developed countries. Therefore, the establishment of a special fund for the Decade in order to provide support for projects within the International Framework of Action for was recommended. Furthermore, in some reports attention was drawn to a lack of commitment by international organizations, financing institutions and, in particular, the United Nations system in particular towards the achievement of the goals and objective of the Decade. Funding agencies were ready to provide relief assistance after a disaster had occurred but support for preparedness and mitigation activities wa. not easily

obtained by the countries concerned, although it was obvious that supporting disaster reduction activities would result in less need for relief and, therefore, mean savings for donor Governments.

50. It was considered that the role of organizations and programmes of the United Nations system in dealing with natural disaster reduction, and of other international organizations in building capacities to reduce natural disasters, should be increased, or that activities for the International Decade for Natural Disaster Reduction should be assigned a higher priority within the United Nations system. In any case, the achievement of the objectives and goals of Decade should be assigned practical support and resources commensurate with the importance of disaster management in development. In this respect, also emphasized was the need to develop and adopt natural disaster reduction strategies in the framework of the continuum from relief to development, with the necessary support provided by international financing institutions and the international community.

51. It was considered that disaster mitigation programmes should be formulated and implemented at the national level but that direct assistance by the Secretariat or other donors would be required for that purpose. Apparently, activities for the Decade have been confined to the scientific level with no "trickle down" effect to the local and national levels. If direct funding could not be provided by the Secretariat, consideration should be given to highlighting special disaster reduction needs in disaster-prone countries in order to attract international funding. In that respect, mention was made of the technical and natural science criteria that continue to prevail, while basic socio-economic reasons for vulnerability to disasters and the impact of climate change and environmental degradation were not sufficiently taken into consideration.

52. Several small island developing countries emphasized that they would not require the same level of assistance as larger developing countries prone to disasters. Yet, the effects of small contributions could be very significant for them. The provision of assistance, it was considered, should be based on the impact of natural disasters on the already vulnerable economy of a small island developing country, rather than on the size of the population, or the magnitude and the occurrence rate of natural disasters. The international community should increase its understanding of the characteristics and vulnerability of small island developing countries and the impact disasters can have on their efforts at sustainable development.

53. The role of regional cooperation was emphasized by many countries. Sharing of information, methodologies and capabilities and the implementation of joint projects at the regional level and among countries with similar disaster proneness were considered

essential for the achievement of progress in disaster reduction. Regional cooperation was considered to be only partly achieved because of the low level of commitment to natural disaster reduction on the part of regional organizations and Governments. It was therefore important that more efficient and practical cooperation mechanisms among neighbouring countries, as well as partnerships between counterpart organizations in industrialized and developing countries, be developed.

54. The development of a follow-up mechanism for the implementation of the recommendations of the World Conference was requested. The IDNDR Secretariat was urged to be more aggressive in its politics with high-level government officials in order to convince decision-makers of the need for disaster reduction. Furthermore, the Secretariat was requested to work more closely with officials from civil defence and planning ministries in order to integrate disaster mitigation objectives into their activities.

55. As stated before, the proclamation of the International Decade for Natural Disaster Reduction was welcomed in the majority of the national reports under review. The future success of the Decade was, however, considered doubtful if the achievement of its goals and objectives at the national levels, and the national committees and focal points for the Decade, were not more effectively supported.